

BookletChart™



Woods Hole

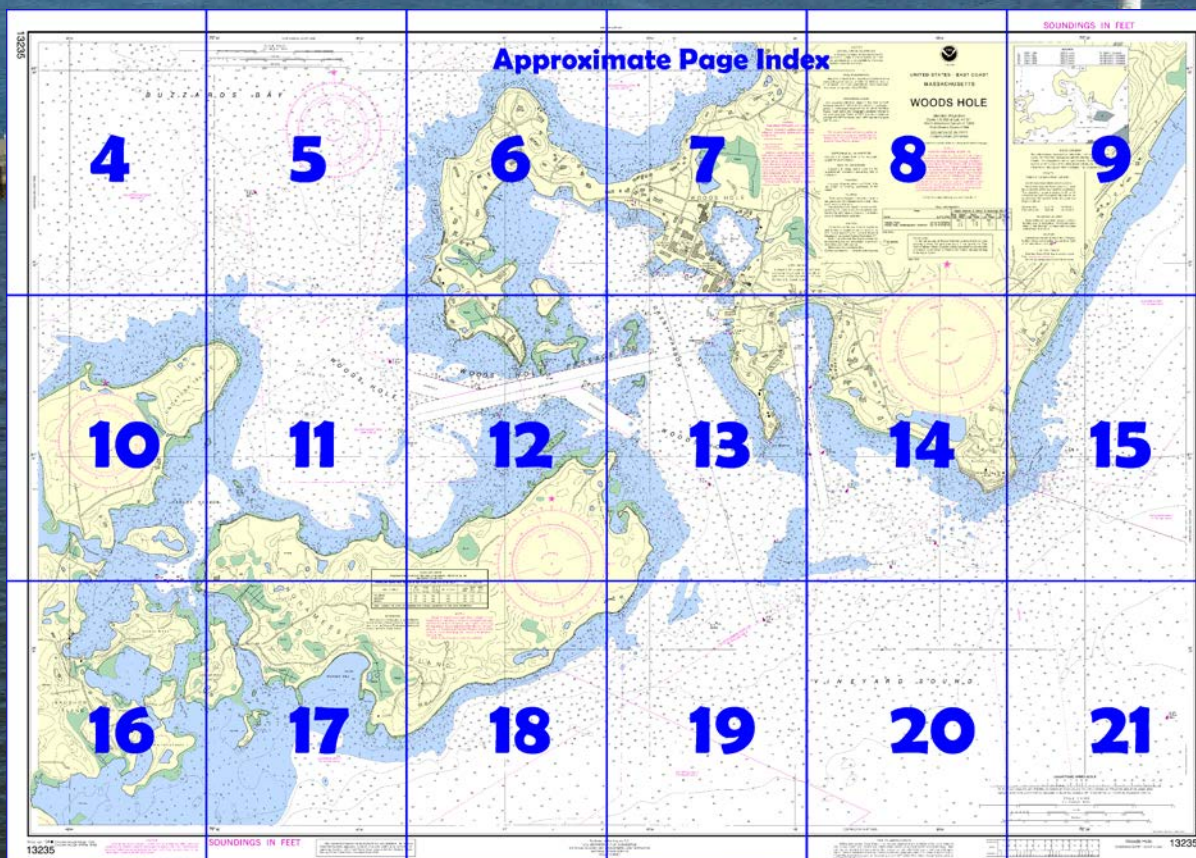
NOAA Chart 13235

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

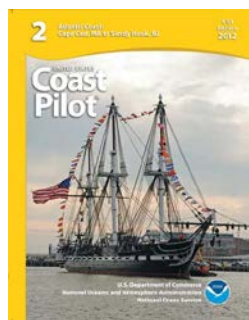
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=13235>



(Selected Excerpts from Coast Pilot)

Woods Hole is that water area lying between the southwest tip of Cape Cod and Uncatena and **Nonamesset Island**, the easternmost of the Elizabeth Islands, with Buzzards Bay on the northwest and Vineyard Sound on the southeast; it includes Great and Little Harbors in the eastern part, and Hadley Harbor in the western part. Woods Hole is also the approach to the town of **Woods Hole** on the northeastern shore of Great

Harbor. The town is a busy commercial center and a transshipping point for passengers and freight to and from Nantucket and Martha's Vineyard. During the summer it is an active resort and frequently a port of call by yachts passing through to Vineyard Sound or Buzzards Bay. There is considerable waterborne commerce in seafood products and general cargo.

Channels.—Woods Hole Passage, a dredged section through the northern part of Woods Hole, connects Vineyard Sound and Great Harbor with Buzzards Bay, and consists of **The Strait** and a spur channel known as the **Branch** at the western end of The Strait, and **Broadway**, the southerly entrance to The Strait from Vineyard Sound. A Federal project provides for channel depths of 13 feet. (See Notice to Mariners and latest edition of charts for controlling depths.) The northerly entrance from Great Harbor into The Strait is preferred over Broadway with its sharp turn, which is difficult in strong currents, especially for low-powered vessels and vessels under sail.

The entrance to **Great Harbor** from Vineyard Sound, between Great Ledge and Nonamesset Shoal, has depths of over 20 feet. A **344°** lighted entrance range leads into the harbor from Vineyard Sound to the wharves at Woods Hole in Great Harbor. A lighted bell buoy marks the entrance and lighted and unlighted buoys mark the channel. When entering on the range, mariners should guard against the current from Buzzards Bay, which has a tendency to set vessels eastward. These channels are marked by buoys and lights, but extreme caution and slack water are required to safely navigate them with drafts greater than 8 feet. Mariners entering from Buzzards Bay should keep in mind that the buoys are colored and marked for passage from Vineyard Sound to Buzzards Bay.

Anchorage.—(See **110.1** and **110.140 (c) and (d)**, chapter 2, for limits and regulations of the deepwater anchorages in the vicinity of Woods Hole.) An anchorage about 0.2 mile square, with poor holding ground and irregular depths ranging from 19 to 62 feet, is at the head of Great Harbor. Shoals covered 5 to 9 feet are northwest of the anchorage.

Good anchorage in depths of 29 to 36 feet is also available about 200 yards northwest of the National Marine Fisheries Service's wharf. Small craft can find good anchorage in Little Harbor and Hadley Harbor.

Dangers.—Numerous ledges and shoals border the channel through Woods Hole. **Great Ledge**, an extensive rocky shoal awash at low water with a full northwest gale, lies between the entrances to Little and Great Harbors; it is marked by a buoy. **Coffin Rock**, eastward of Great Ledge and covered 5 feet, is marked by a lighted buoy 120 yards eastward of it. **Nonamesset Shoal**, covered 10 feet, extends about 0.2 mile eastward from Nonamesset Island, at the entrance to Great Harbor. **Parker Flats** extend as much as 200 yards off the eastern shore of Great Harbor northward of Juniper Point. Most of these dangers are marked by buoys. Fringing the passage westward of Great Harbor are many other ledges and shoals. **Red Ledge**, grassy, and **Grassy Island**, with its surrounding ledge marked by a light, are on the western side of Great Harbor Channel. **Middle Ledge**, which uncovers 1 foot in places and is marked by buoys, is on the south side of The Strait. A ledge, awash at low water and marked by a light, is about 250 yards westward of Middle Ledge.

Hadley Rock, covered 5 feet, is some 500 yards west-southwestward of the light west of Middle Ledge. A rocky shoal area extends more than 0.3 mile westward of **Penzance Point**, the southern extremity of **Penzance**, which is the curving peninsula sheltering the west and northwest sides of Great Harbor. Most of the dangers adjoining the passage channel are marked by navigational aids.

Currents.—The velocity of the current is about 3.5 knots in The Strait southward of Penzance Point. (See the Tidal Current Tables for predictions.) Both the velocity of the current and time of slack water are affected by strong winds.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Boston

Commander
1st CG District
Boston, MA

(617) 223-8555

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

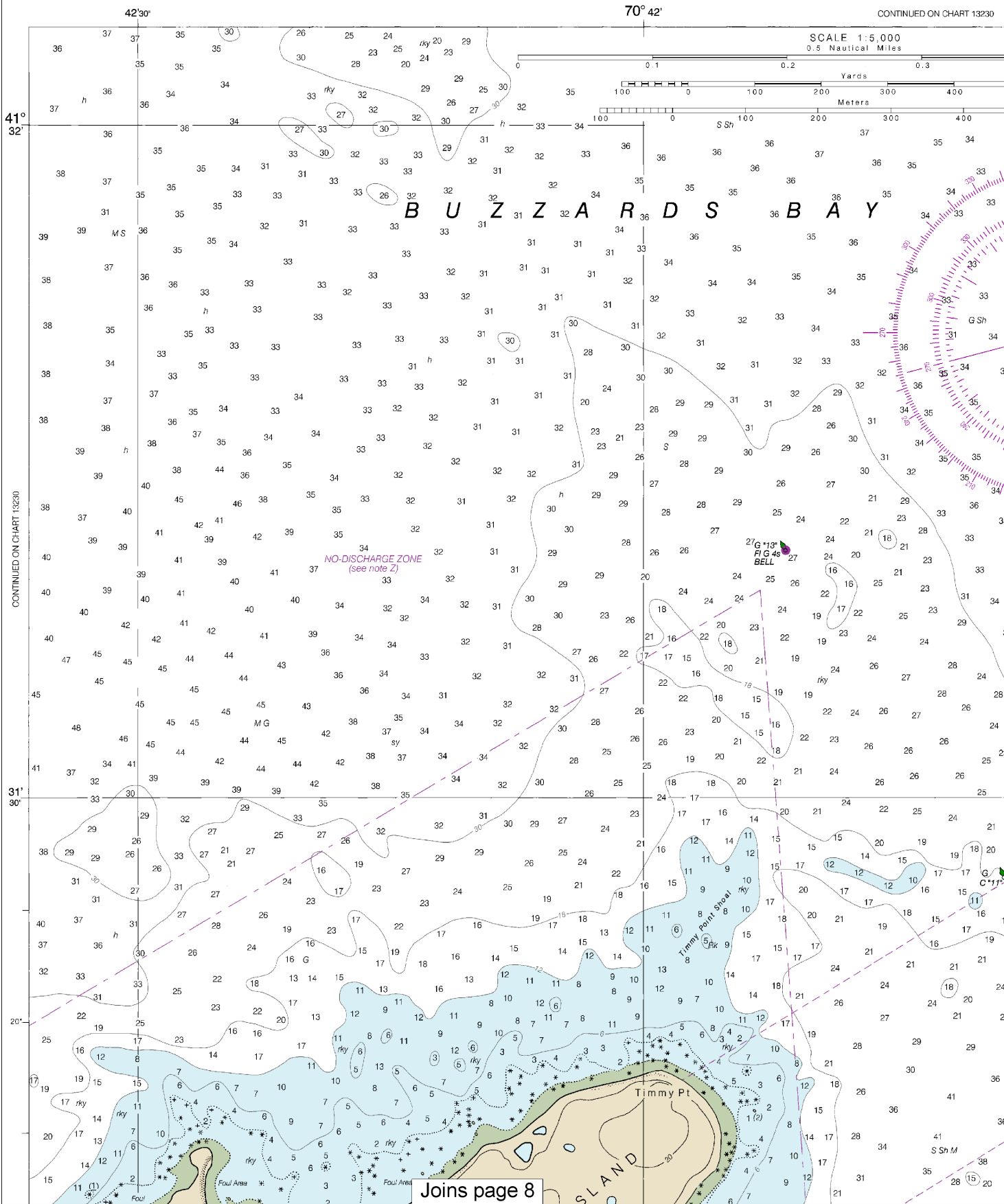
Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>

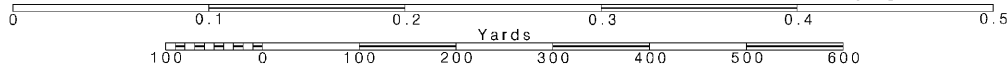


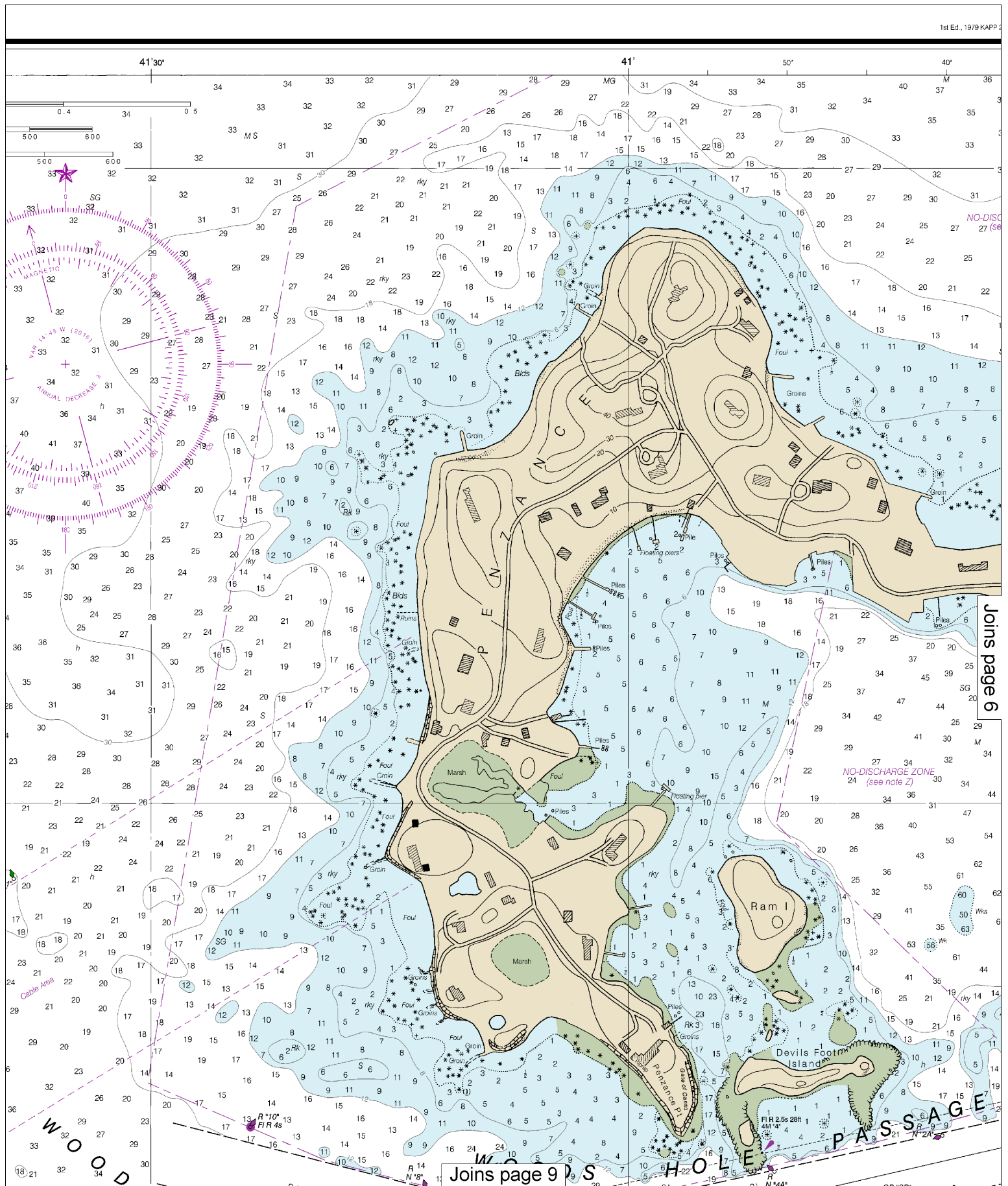
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

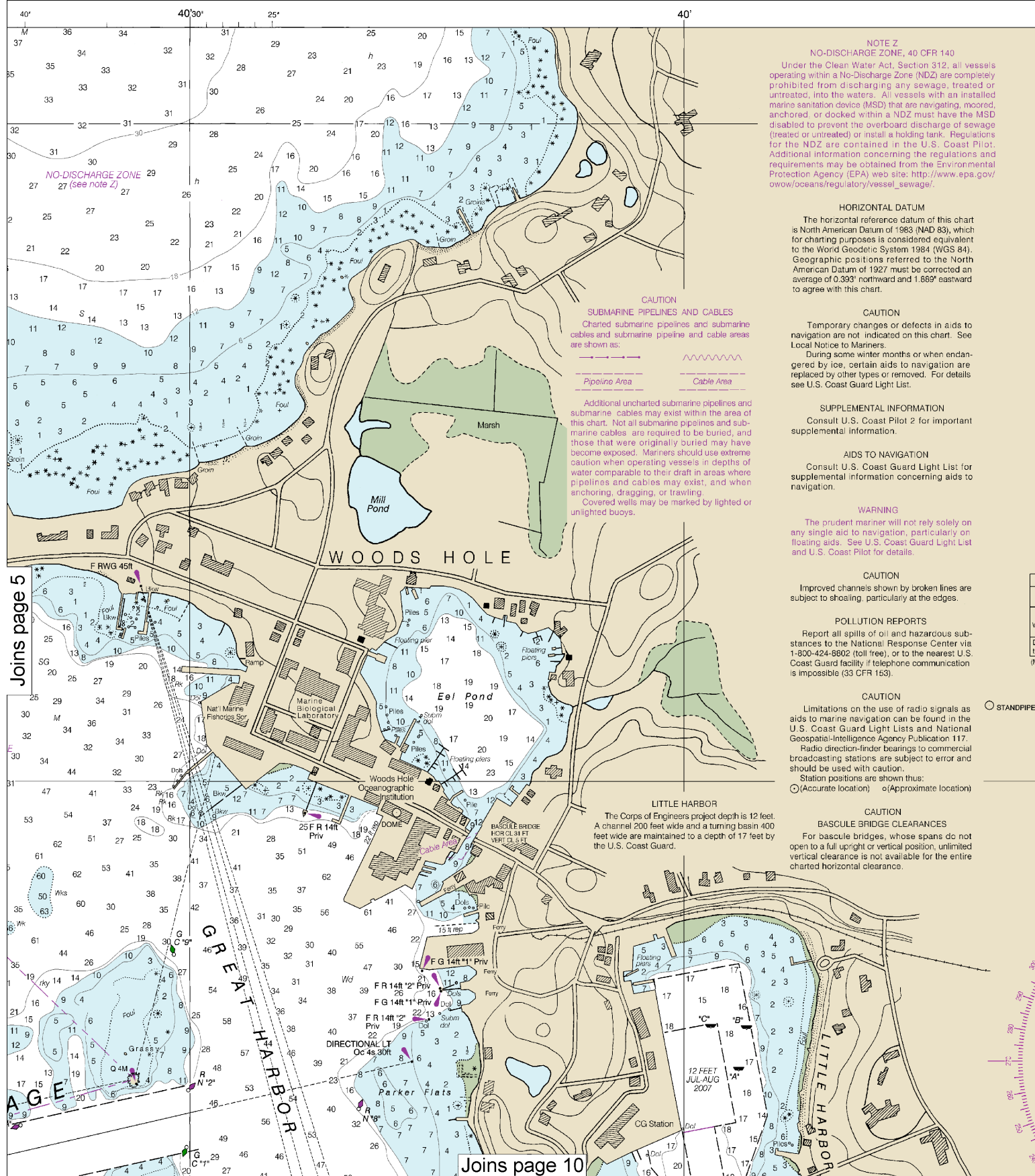
SCALE 1:5,000
0.5 Nautical Miles

See Note on page 5.





This BookletChart was reduced to 70% of the original chart scale.
The new scale is 1:7142. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



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Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.

SOUNDINGS IN FEET



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST
MASSACHUSETTS

WOODS HOLE

Mercator Projection
Scale 1:5,000 at Lat. 41°31'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

HEIGHTS

Heights in feet above Mean High Water.

For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: ---

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

TIDAL INFORMATION

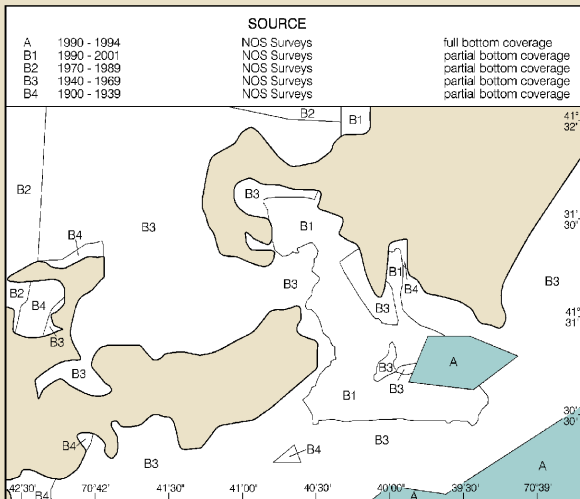
NAME	PLACE (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water feet	Mean High Water feet	Mean Low Water feet
Woods Hole, Oceanographic Institution	(41°31'N/70°40'W)	2.2	1.9	0.1

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>. (May 2012)

WOODS HOLE CURRENT

In the narrow part of Woods Hole Passage (Woods Hole, 0.1 mile SW of Devils Foot Island) the current velocity at times exceeds 4.5 knots. Velocities as high as 5.0 knots have been reported by the U.S. Coast Guard. For daily predictions of the current, the Tidal Current Tables, Atlantic Coast should be consulted.

Dec 2007



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, *United States Coast Pilot*.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Hyannis, MA	KEC-73	162.550 MHz
Providence, RI	WXJ-39	162.400 MHz

RADAR REFLECTORS

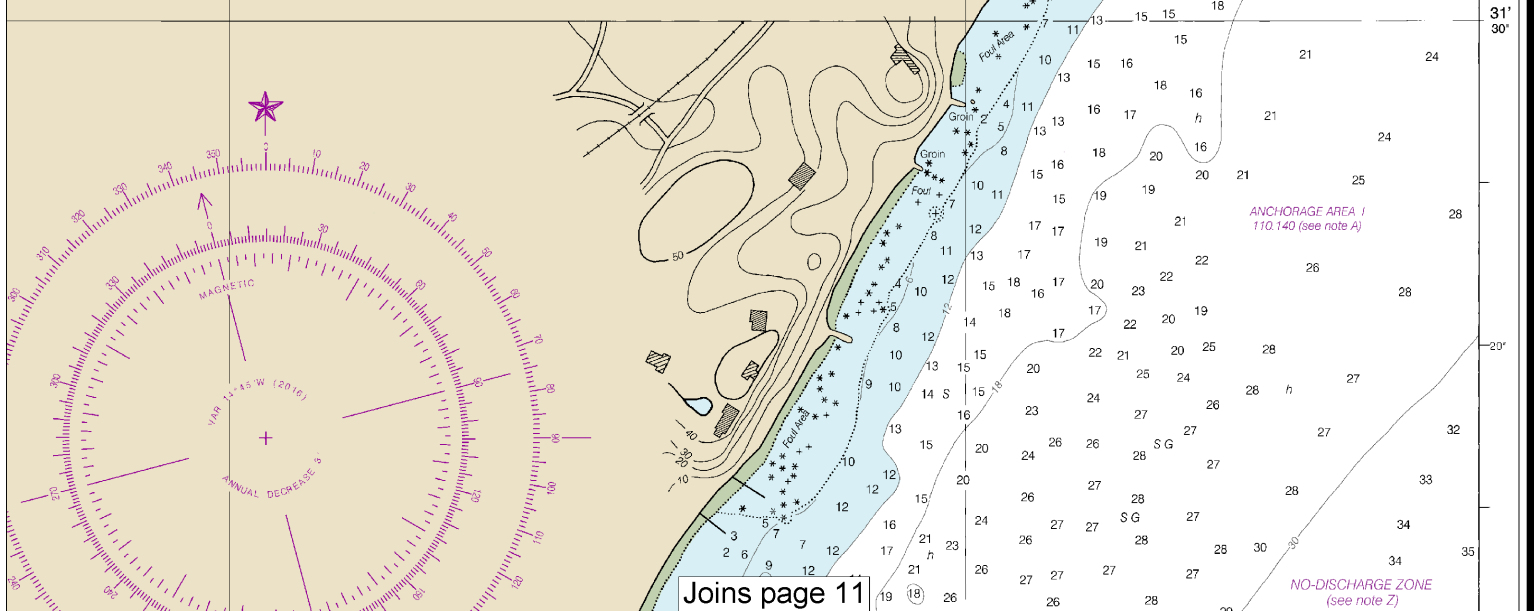
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

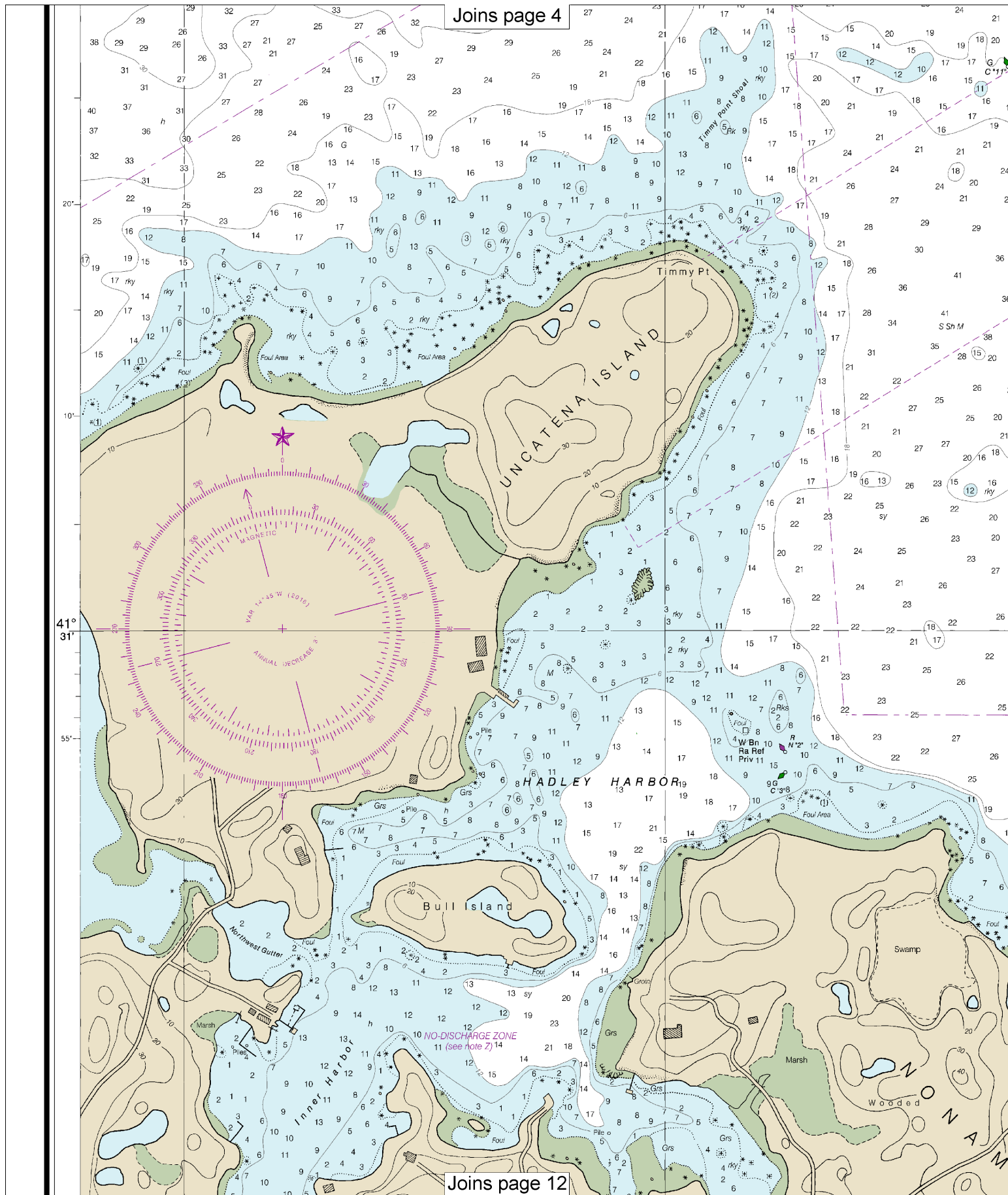
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: *

FISH TRAP AREAS

Boundary lines of fish trap areas are shown thus: ---
Submerged piling may exist in these areas.



Last Correction: 4/13/2016. Cleared through:
LNM: 3016 (7/26/2016), NM: 3216 (8/6/2016), CHS: 0616 (6/24/2016)



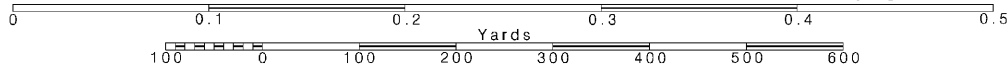
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Note: Chart grid lines are aligned with true north.

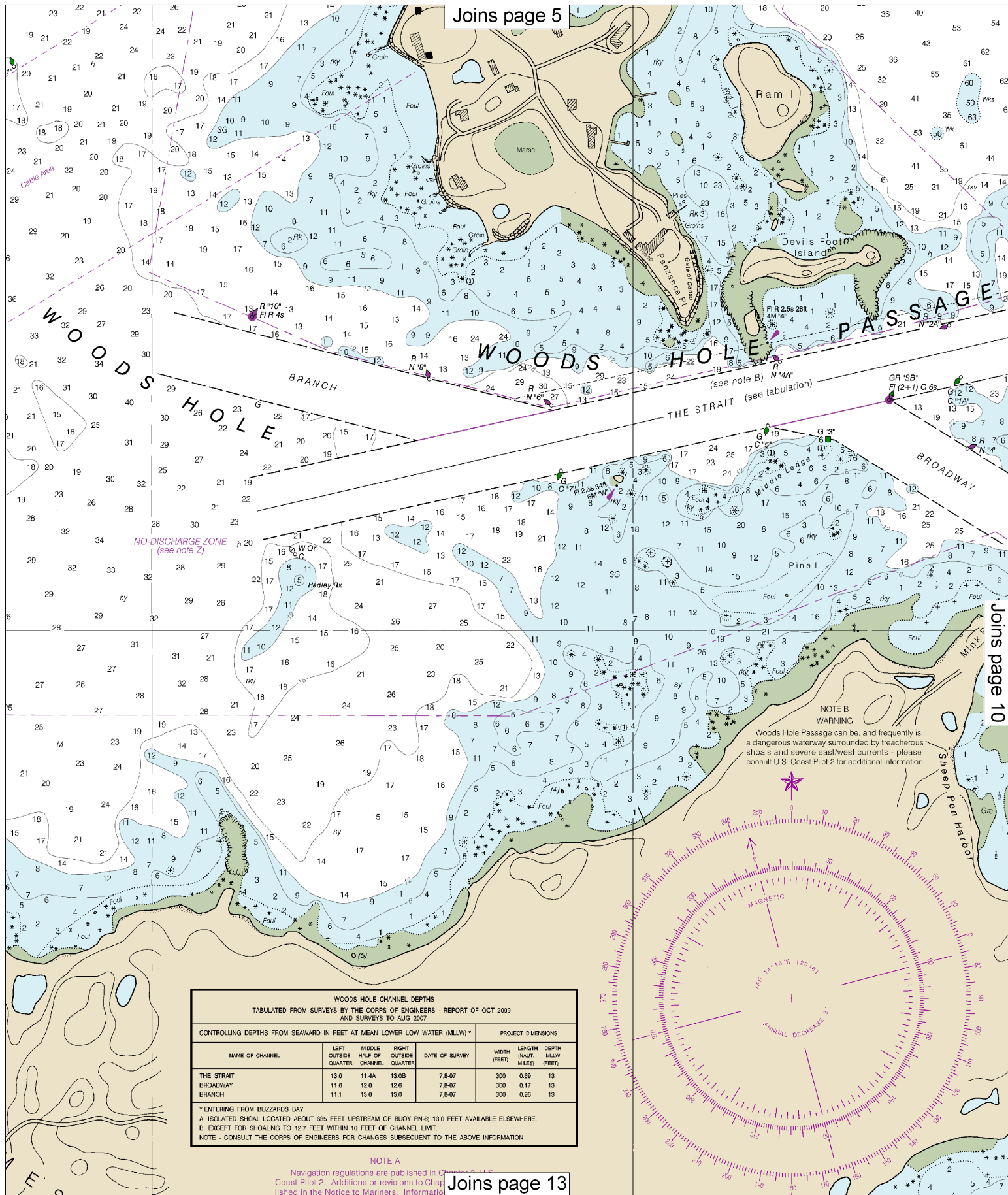
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SCALE 1:5,000
0.5 Nautical Miles

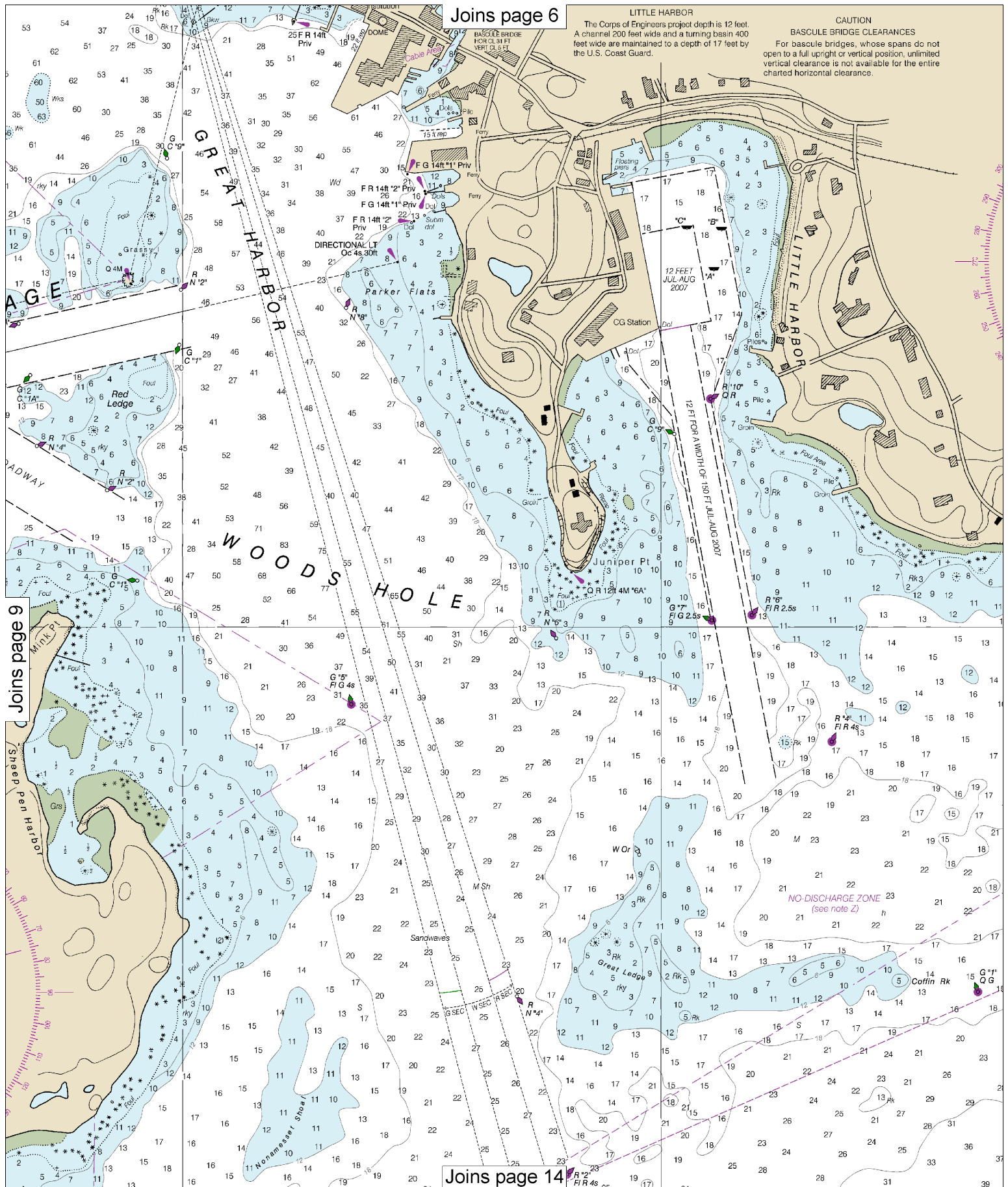
See Note on page 5.



Joins page 5



Joins page 13



Joins page 6

LITTLE HARBOR
The Corps of Engineers project depth is 12 feet.
A channel 200 feet wide and a turning basin 400
feet wide are maintained to a depth of 17 feet by
the U.S. Coast Guard.

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not
open to a full upright or vertical position, unlimited
vertical clearance is not available for the entire
charted horizontal clearance.

Joins page 9

Joins page 14

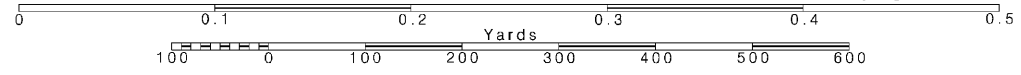
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Note: Chart grid
lines are aligned
with true north.

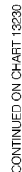
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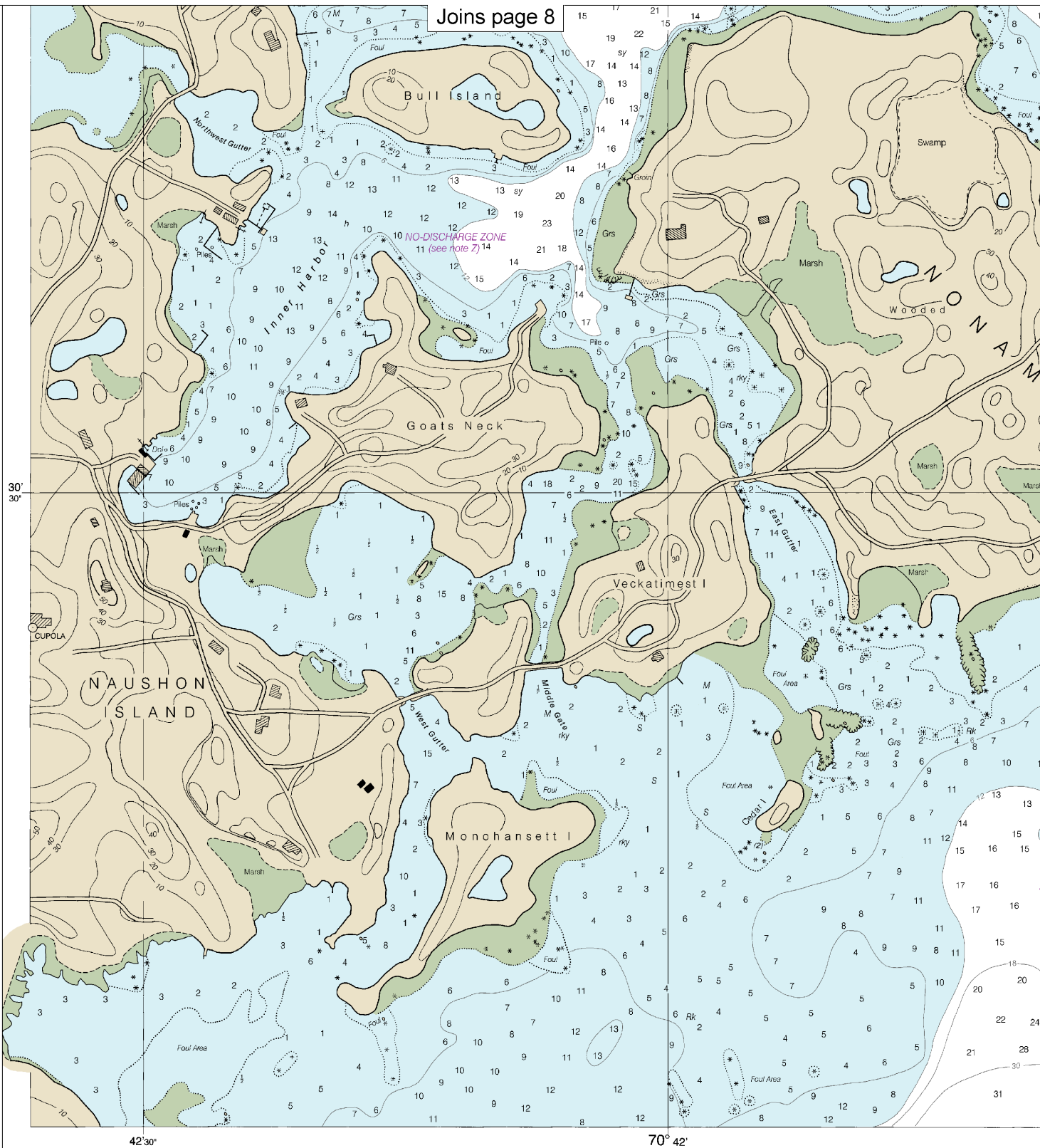
See Note on page 5.



Joins page 15



Joins page 8



7th Ed., Jul. 2012

13235

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

Last Correction: 4/13/2016. Cleared through:
LNM: 3016 (7/26/2016), NM: 3216 (8/6/2016), CHS: 0616 (6/24/2016)

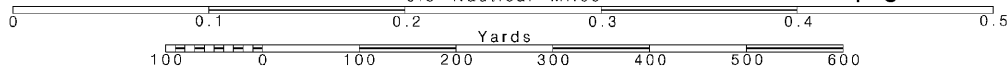
12

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:5,000
0.5 Nautical Miles

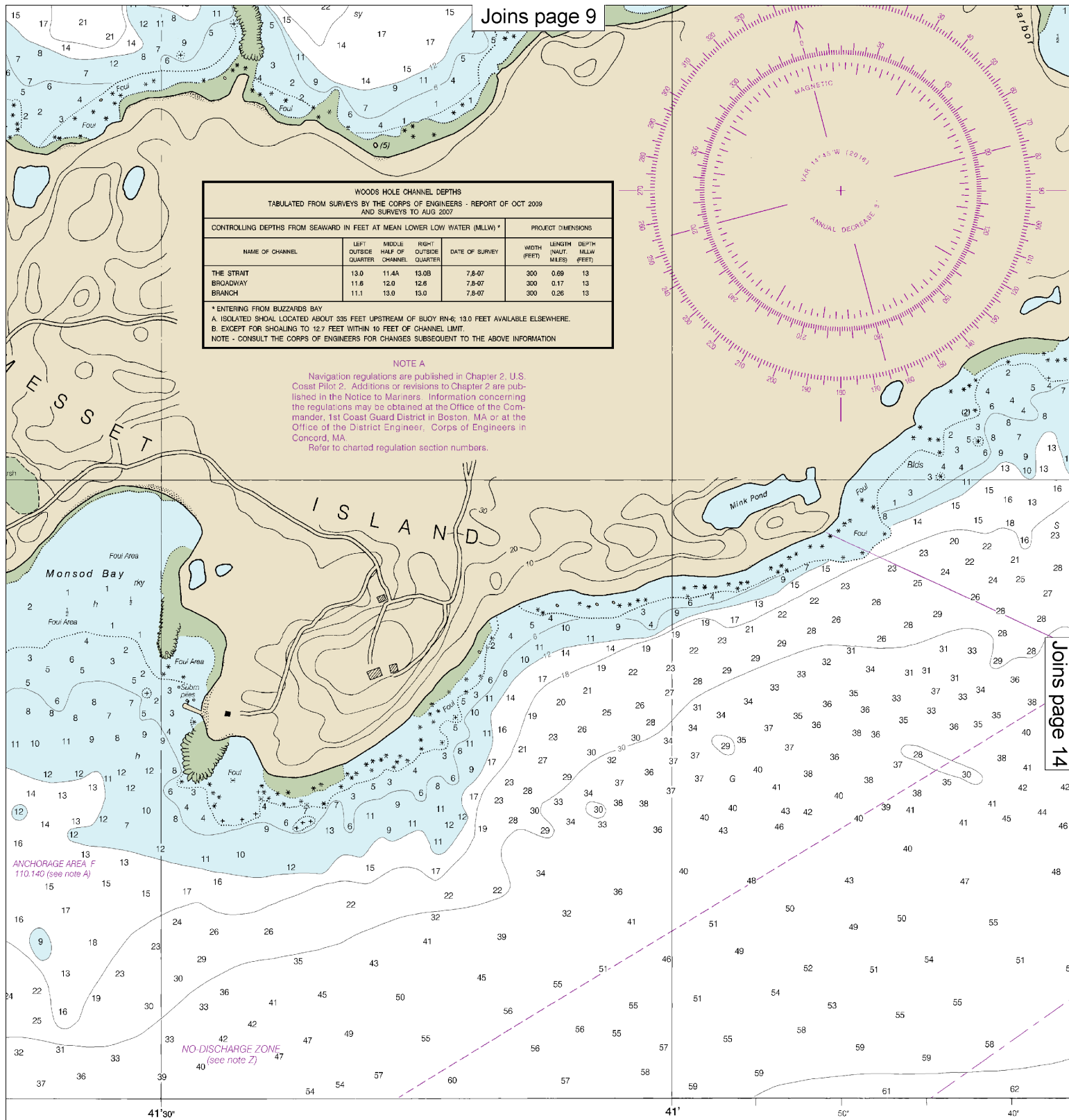
See Note on page 5.



WOODS HOLE CHANNEL DEPTHS						
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2009 AND SURVEYS TO AUG 2007						
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	DEPTH (FEET)
THE STRAIT	13.0	11.4A	13.0B	7.8-07	300	0.69
BROADWAY	11.8	12.0	12.8	7.8-07	300	0.17
BRANCH	11.1	13.0	13.0	7.8-07	300	0.26

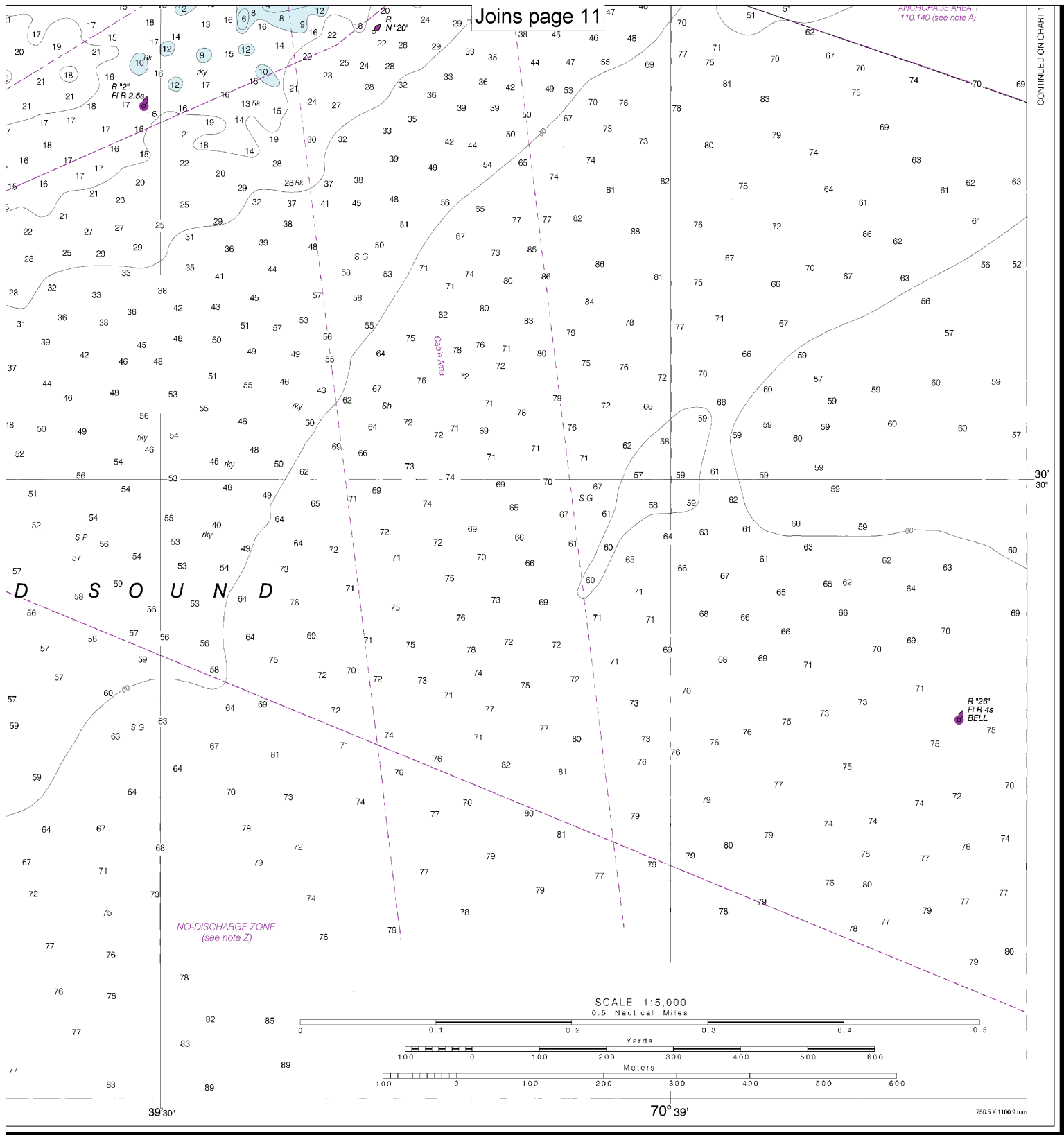
* ENTERING FROM BUZZARDS BAY
 A. ISOLATED SHOAL LOCATED ABOUT 335 FEET UPSTREAM OF BUOY RN-6; 13.0 FEET AVAILABLE ELSEWHERE.
 B. EXCEPT FOR SHOALING TO 12.7 FEET WITHIN 10 FEET OF CHANNEL LIMIT.
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

NOTE A
 Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.
 Refer to charted regulation section numbers.



SOUNDINGS IN FEET

Published at Washington, D.C.
 U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY



FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Woods Hole
SOUNDINGS IN FEET - SCALE 1:5,000

13235



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Interactive chart catalog	—	http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.